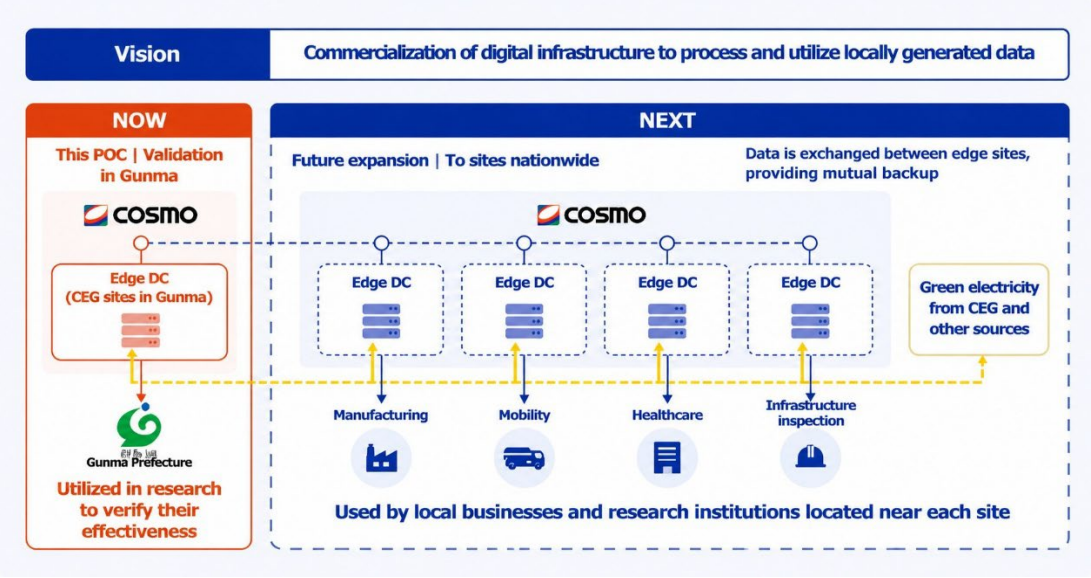
October 30, 2026
Cosmo Energy Holdings Co., Ltd.
Gunma University

Cosmo Energy Group and Gunma University to Initiate Proof-of-Concept Testing of Edge Data Centers at Former Service Station Sites
~Turning Energy Hubs into Data Centers to Drive Regional Digitalization Through the Local Generation and Consumption of Data~

Cosmo Energy Holdings Co., Ltd. and National University Corporation Gunma University (hereafter, “Gunma University”) will commence Proof-of-Concept (POC) testing of edge data centers at former Cosmo Energy Group service station sites in Gunma Prefecture, with the aim of commercializing regionally distributed data infrastructure.

Edge data centers are small-scale facilities that process data close to where it is generated. They are also energy-efficient, placing less strain on local power grids than large, building-based data centers in urban areas. This is the first demonstration project to leverage an energy company’s existing sites for edge data centers in Japan.

Building on the knowledge gained through this POC, the Cosmo Energy Group will explore applications for edge data centers across a broad range of fields, including manufacturing, logistics, healthcare, and infrastructure inspection, with a view to commercialization. Looking ahead, the Group plans to expand the initiative to other locations, including both former service station sites and currently operating service stations, as well as its idle land assets in other business sectors, leveraging the Gunma initiative as a model. By enabling data generated in a given region to be processed and consumed locally, the Group aims to support regional digitalization, including improved productivity for local businesses and the advancement of healthcare and public services.



Overview of the data center business

■ Background and Outline of the POC

As artificial intelligence (AI) becomes more widespread, local industrial sites such as factories, healthcare facilities, and logistics centers face an urgent need to accommodate AI applications that leverage vast amounts of data, including video and sensor data. The Cosmo Energy Group views the data generated at these sites as a new strategic resource, second only to oil.

However, processing this data at large-scale, urban data centers or in the cloud presents the following key challenges.

- ・Communication costs: Transferring large volumes of data increases both network traffic and data-transfer costs.
- ・Communication latency: Transmitting data to remote locations takes time, making real-time processing difficult.
- ・Confidentiality: Externally storing and processing sensitive information, such as medical data and manufacturing know-how, can be difficult.

For these reasons, the importance of edge computing, in which data is processed close to where it is generated, is growing.

In this POC, the Cosmo Energy Group will install edge data centers at two of its sites in Gunma Prefecture and connect them via a closed network, a dedicated communications network isolated from the internet. These edge data centers will support research at Gunma University, including on physical AI and medical data processing, allowing the Group to verify their effectiveness and identify challenges to their commercialization.

Overview

POC sites	Two sites in Gunma Prefecture
Facilities	Edge data centers equipped with GPU servers, power supply systems, cooling equipment, and other facilities
Partner organization	Gunma University
POC duration	November 2026 to September 2027 (per current plan)

Challenges and Verification Items

Challenges	Edge data center-driven solutions	Key verification items
Communication costs	Data is processed near the site, with only required data being transferred	Data transfer volume reduction and economic efficiency
Communication latency	Data is processed near the site	Whether communication latency can be reduced
Confidentiality	Data is processed within a closed network	Whether data can be processed safely without being transferred outside the organization

Roles of Each Party

Cosmo Energy Group	Installation and operation of edge data centers, building of a closed network, and coordination with companies
Gunma University	Use of edge data centers in research and evaluation of their

	effectiveness

■ **Significance**

- In its long-term vision, Vision 2035, the Cosmo Energy Group identifies the accelerating adoption of AI and digitalization, as well as growing demand for data centers, as key changes in the business environment. By leveraging its nationwide network of sites suitable for edge data center installations, including former service station sites, currently operating service stations, and idle land assets held by its other existing businesses, the Group can establish small-scale data processing hubs in communities across Japan without having to acquire additional land.
- Gunma University is conducting research involving medical data and physical AI, creating a need for an environment in which highly confidential data can be processed without being transferred outside the university. In addition, Gunma Prefecture is home to a high concentration of manufacturing industries, making it well-positioned to support the application of knowledge gained through the POC by local companies.

■ **Overview of Each Party**

○**About the Cosmo Energy Group**

The Cosmo Energy Group's business activities span the entire energy supply chain, from crude oil development in the Middle East to oil refining in Japan and the domestic and international sale of petroleum products. The Group also provides a broad range of energy indispensable to communities worldwide, including through its petrochemical and wind power generation businesses. Its overarching mission is to contribute to communities worldwide by delivering a safe and stable energy supply, through measures such as diversifying procurement regions and establishing a rapid supply system in the event of a disaster. As a group of companies managing energy resources, the Cosmo Energy Group is likewise committed to sustainable growth, factoring in both environmental and social considerations.

○**About Gunma University**

Basic Philosophy

- To foster motivated, highly creative individuals capable of serving as human resources and willing to embrace new and difficult issues from a broad global perspective through the incorporation of the principles of the dignity of mankind in order to best respond to the needs of society.
- In order to elevate the global standards with regard to educational and research activities, through the collaboration with educational and research institutions both at home and abroad, and to gather timely information from throughout the world in terms of scholarship and scientific technology, the university seeks to promote cutting-edge creative academic pursuits through on-going efforts to improve by learning with and from others.
- In order to establish the autonomy of the university, in deference to the independence and autonomy of each constituent member of the university community, we must also strive to establish and maintain the academic freedom that serves as the institutional security of the university so that we can realize an enhanced invigoration and

individualization of the education and research activities that are carried out. At the same time, we must maintain a rigorous awareness of our self-responsibility and strive for a constant elevation of our role as an open university.

(End)

(The official language for Cosmo Energy Group's filings with the Tokyo Stock Exchange and Japanese authorities, and for communications with our shareholders, is Japanese. We have posted English versions of some of this information on this website. While these English versions have been prepared in good faith, Cosmo Energy Group does not accept responsibility for the accuracy of the translations, and reference should be made to the original Japanese language materials.)